

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0083810; AI 18519; PER20080001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Village of Albany
 Village of Albany Treatment Works
 P.O. Box 1000
 Albany, LA 70711

- II. **PREPARED BY:** Angela Marse

- DATE PREPARED:** December 23, 2008

- III. **PERMIT ACTION:** reissue LPDES permit LA0083810, AI 18519; PER20080001
 LPDES application received: August 28, 2008
 LPDES permit issued: March 1, 2004
 LPDES permit expired: February 28, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Village of Albany.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located east of Hwy. 43 at the end of 2nd Street in Albany, Livingston Parish.

- D. The treatment facility consists of a three-cell aerated lagoon followed by a rock-reed filter system. Disinfection is by ultraviolet light.

- E. Outfall 001
 Discharge Location: Latitude 30° 29' 52" North
 Longitude 90° 34' 45" West
 Description: treated sanitary wastewater
 Design Capacity: 0.1 MGD
 Type of Flow Measurement which the facility is currently using:
 continuous recorder

V. **RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into the Little Natalbany River in segment 040503 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

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The designated uses and degree of support for Segment 040503 of the Lake Ponchartrain Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 040503	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040503 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040503 of the Lake Pontchartrain Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury, dissolved oxygen (EPA), pathogen indicators, and phosphorus (EPA). To date no TMDLs have been completed for this waterbody. A reopener clause has been included in the permit should the TMDLs require more stringent effluent limitations. Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Dissolved oxygen and phosphorus

BOD₅ has been used as an indicator parameter in the permit for dissolved oxygen and phosphorus, a nutrient. BOD₅ is used as a method to measure the amount of dissolved oxygen in the waste stream utilized by organisms during the decomposition of organic material over a five day period. BOD₅ limits protect against the discharge of oxygen depleting pollutants (like nutrients) at levels that would cause in stream oxygen problems. Dissolved oxygen is directly related to nutrient impact. Thus, when LDEQ maintains and protects DO, the LDEQ is in effect also limiting and controlling nutrient concentrations and impacts. (LDEQ declaratory ruling April 29, 1996) The effluent limit for BOD₅ is base on the Statewide Sanitary Effluent Limitations Policy and is the same as the previous permit.

Pathogen Indicators

Monitoring for fecal coliform colonies is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against the development of pathogenic organisms in the receiving waterbodies, fecal coliform limits have been established in the permit. These limits are based on State standards for primary contact recreation.

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Mercury

The source of mercury has been identified as atmospheric deposition. However, sometimes commercial users can contribute mercury to effluent discharges from wastewater treatment plants depending on their business operations. A review of the Village of Albany's commercial users does not indicate any potential sources of mercury that would contribute to the receiving waterbody's mercury impairment. Therefore, no limit or mercury prevention program plan has been included in the draft permit. Should the TMDL for mercury determine a mercury effluent limitation is necessary, a reopener clause has been included in the draft permit.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040503 of the Lake Ponchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf Sturgeon, which is listed as a threatened/endangered species. This draft permit has been sent to the FWS for review. As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and after consultation with FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the Gulf Sturgeon since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001

No TMDL Studies have been conducted since issuance of the previous permit and the facility has not been modified. The 2000 305 (b) Water Quality Inventory Report indicates nutrients as contributing to receiving waterbody impairments. The Village of Albany was required to sample for ammonia nitrogen in the previous permit. However, no sample results were reported on DMRs nor could the Village submit any once requested. The 2006 305 (b) Water Quality Inventory indicates the receiving stream is impaired for phosphorus. As stated in Section V. Receiving Waters, limiting BOD₅ will limit nutrients. However, without data to dispute the presence of ammonia nitrogen, the monitoring and reporting requirement will remain in the permit. Therefore, the proposed permit will contain the same effluent limits as the previous permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	8	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	13	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-nitrogen	---	Report mg/l	Report mg/l	BPJ based on the previous permit.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0083810: Issued: March 1, 2004
Expired: February 28, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	Report mg/l	Report mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pretreatment language.

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following most recent inspection was performed for this facility.

Date: July 29, 2003

Inspector: Louis Martin

Findings and/or Violations:

1. The facility permit was issued October 14, 1997. They submitted a renewal application on November 6, 2002.

2. The permit required flow to be measured by continuous recorder. No flow meter has been installed to date.

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3. A review of DMRs revealed BOD and Fecal coliform violations.
4. The DMRs were not being signed by a responsible official.
5. The facility was referred to the Enforcement Division. A warning letter was sent to the facility in March, 2004 as a follow-up to the inspection.

B) Compliance and/or Administrative Orders

A review of the files (2000-2008) indicates no recent enforcement actions administered against this facility:

C) DMR Review

A review of the discharge monitoring reports for the period beginning September, 2006 through September, 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
CBOD ₅	001	March, 2007	10 mg/l	11.4 mg/l
CBOD ₅	001	January, 2008	10 mg/l	13.55 mg/l
CBOD ₅	001	January, 2008	15 mg/l	16.6 mg/l
CBOD ₅	001	May, 2008	10 mg/l	<24 mg/l
CBOD ₅	001	May, 2008	15 mg/l	<24 mg/l
Fecal coliform	001	December, 2006	400col/100ml	1020col/100ml
Fecal coliform	001	March, 2007	400col/100ml	>2000col/100ml
Fecal coliform	001	August, 2007	200col/100ml	328col/100ml
Fecal coliform	001	August, 2007	400col/100ml	410col/100ml
Fecal coliform	001	September, 2007	200col/100ml	720col/100ml
Fecal coliform	001	September, 2007	400col/100ml	>2000col/100ml
Fecal coliform	001	October, 2007	200col/100ml	>2000col/100ml
Fecal coliform	001	October, 2007	400col/100ml	>2000col/100ml
Fecal coliform	001	November, 2007	200col/100ml	>2000col/100ml
Fecal coliform	001	November, 2007	400col/100ml	>2000col/100ml
Fecal coliform	001	December, 2007	400col/100ml	960col/100ml
Fecal coliform	001	January, 2008	200col/100ml	1086col/100ml
Fecal coliform	001	January, 2008	400col/100ml	2000col/100ml
Fecal coliform	001	April, 2008	200col/100ml	1288col/100ml
Fecal coliform	001	April, 2008	400col/100ml	2000col/100ml

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

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In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.1 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.1 \text{ MGD} \times 10 \text{ mg/l} = 8 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

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The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a reissue permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Village of Albany, Village of Albany Treatment Works, August 28, 2008.